

CATER PROJECT

“Door – to – Door in 4 Hours”

CATER – Coordinating Air transport Time Efficiency Research



Europe, through the High Level Group on Aviation Research, ACARE and the Commission, has a vision for air transport in meeting societal and market needs over the coming 30 years. Central to this is time efficiency, meaning reduced door-to-door journey times, seamless intermodal connections and reliability. For this Europe will continue to engage in large scale, intensive and coordinated research & innovation. In order to plan and manage this process policy makers and research directors need a complete picture of what research and innovation is being conducted, of gaps present and how EU funded R&I meets Europe’s goals.

CATER – Coordinating Air transport Time Efficiency Research is a 48 months Coordination project co-financed with support from the European Commission through FP7. It is designed as a research and innovation (R&I) observatory and policy advisory centre run by an authoritative group with deep industry knowledge, access to a network of all relevant R&I organizations and excellent information gathering and knowledge management processes and tools. CATER will deliver valuable and insightful reports and recommendations which will be packaged and disseminated effectively. CATER will conduct an annual review of the state of the art of R&I, identify gaps in the landscape and bottlenecks to innovation and formulate strategic recommendations to address these. It shall review the landscape in the context of the activities defined in the Strategic Research & Innovation Agenda (SRIA) of ACARE, tightly connected to ACARE WG1 goals (i.e. Meeting societal and market needs).

www.cater-transport-time-efficiency.eu

1. PROJECT PARTENERS

SESM



Founded in 1990, SESM is a large private non-profit Research Centre controlled by SELEX Sistemi Integrati (top 3 worlds leaders in ATC systems) and Selex-Galileo S.p.A. As well as its owners, SESM is part of Finmeccanica Group. It is the main SELEX-SI applied research centre in the South of Italy. It operates in the fields of defense, air traffic management and logistics of complex machineries.

The performed activities are about the industrial research, precompetitive development and human resources training for the associated companies. Some interest has always been devoted to the development of prototype solutions for aerial transport (control fleets, systems management of emergencies, optimal allocation of resources, simulators, supervision systems, electronic technical documentation). SESM has a long and consolidated experience in realizing and managing national and international research projects. It participated in several research programmes (such as DISPLAY) funded by Italian organizations (MISM, MiUR) and ATOM (FP7-AAT-2007-RTD-1), SWIM-SUIT (FP6-AEROSPAC), SOS (Marie-Curie FP7-PEOPLE-2009-IAPP), and CRITICAL STEP (Marie-Curie call FP7-PEOPLE-2008-IAPP) by European organizations (European Commission and European Council), concerning National Development Plans, European Framework Programmes and other European Programmes.

www.sesm.it

TGM – Transylvania Targu Mures International Airport



Transylvania Targu Mures International Airport is an airport located near the town of Ungheni, Mureş County, in central Romania. Opened in 1961, it serves the city of Târgu Mureş as well as Mureş, Harghita, Covasna, Alba and Bistrita counties. Formerly known as Vidrasău, it was renamed Transylvania Târgu Mureş in August 2006. Târgu Mureş Airport provides services for an area of 24,500 square kilometers, with a number of 2.6 million inhabitants. The airport has undergone extensive renovation. In October 2009 a new international terminal was opened, and at the beginning of 2010 a new lighting system and ILS cat II was installed, allowing the handling of flights 24 hours a day in low visibility conditions. Now, the airport is ready to start the execution of a new investment project related to extension of runway, the associated surface movement areas (taxiways, aprons) and associated lighting system cat II/III ICAO.

www.targumuresairport.ro

ICTS UK Ltd



ICTS UK Ltd is wholly-owned subsidiary of ICTS Europe which is present in 18 EU nations. Established in 1987, ICTS UK Ltd is one of the largest private security

companies in United Kingdom. With principle office in London and additional operational centres in all key airports including Manchester, Edinburgh, Luton and Belfast, ICTS UK Ltd offers national cover and a comprehensive range of security services to airports, airlines, corporate and public sector clients.

www.icts.co.uk

ISDEFE – Ingeniera de Sistemas para la Defensa De Espana SA



Isdefe is a state owned company founded in September 1985, through an agreement by the Council of Ministers, with the objective of providing technical engineering support and consulting services for advanced technologies in the Defence and Civil sectors. Isdefe has 1000 employees and reports to the Secretary of State for Defence through a Board of Directors, comprised of Defence Ministry Advisors (Central Units and Armed Forces), the Ministry of Development and the Ministry of Economy and Taxation.

ISDEFE is actually involved in ADAHR (Assessment of Degree of Automation on Human Roles) WP-E SESAR, TITAN (turnaround Integration in trajectory and Network), ALICIA Project (All Condition Operations and Innovative Cockpit Infrastructure), NEWO (emerging Network-Wide effects of inventive Operational approaches in ATM) WP-E SESAR.

www.isdefe.es

ONERA – Office National D'études et de Recherches Aérospatiales



Onera (Office National d'Etudes et Recherches Aérospatiales) is the French non-profit national aerospace research centre. It is a public research establishment, with eight major facilities in France and about 2,000 employees, including 1,500 scientists, engineers and technicians

ONERA has 35 recent or on-going projects in the fields of air traffic and other related aviation and aerospace systems: 3S, Space Systems Survivability; 4DCo-GC, 4D contract guidance and control of the aircraft; Anibal, Reduction of the Noise Level of Light Aircraft; ATS 2050 Study – Phase 2; Clean Sky Technology Evaluator; EOLE, an airborne space launcher for nano-satellites; Expertise ACCS, Air Command and Control System; GRAVES Renovation (Space Surveillance System); IESTA – Air Transport Systems Evaluation Infrastructure; Ifats, Innovative Future Air Transport System; Lea, toward the Development of Hypersonic Air-Breathing Vehicles; MEPHISTO, Federated and interoperable means of study for the technical and operational simulation; P-PLANE, The Personal Plae Project; P²-ROTECT, Prediction, Protection & Reduction of OrbiTal Exposure to Collision Threats; PRECISE, Research Platform for the evaluation of

the kinematics and radar signatures of vehicles; Radar TLP (Very Long Range); SESAR. Ministry of Development and the Ministry of Economy and Taxation.

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www.onera.fr

ALTRAN AG



ALTRAN AG is a wholly owned subsidiary of the international industrial group, Altran which operates in over twenty countries throughout Europe, Asia and the Americas. Altran Research was launched in January 2009 with the aim of strengthening Altran's positioning in innovation consulting. Our cross-curricular and transverse research is based on three themes essential in order to tackle complexity: Sustainability Engineering & Assessment (SEA): pre-normative research to design and develop processes, methodologies and tools geared to enhance the sustainable value of solutions (technologies, products, segments, and so on); Advanced Products & Solutions (APS): research produced to explore available technologies and demonstrate these concepts; Management & Performance (M&P): organisational research geared to developing organisations and innovative practices as well as improving the performances of Altran and its clients.

www.altran.ch

Ciaotech S.r.l (PNO Group B.V.)



Ciaotech S.r.l. is a limited private company and part of the European technology innovation management and grants consultancy PNO Group B.V.

PNO, established in 1984, is specialized in Grants and Innovation Management, providing support services to private and public organizations in Innovation processes, Technology Transfer, and funding for research, development and innovation. PNO is made up of a pool of around 250 professionals across 12 Member States including scientists, engineers, consultants, a Brussels policy advisory service, as well as financial and legal experts.

PNO is involved in a number of EU funded network projects to build communities to further innovation in specific sectors, such as the bio-based product market (BIOCHEM), transport (SMART), security (OSMOSIS), open source and embedded software (SHARE). The company has the proven capability to link innovation suppliers and

adopters from a unique Europe- wide client network in multiple sectors, using advanced methodologies and proprietary on-line networking. PNO has its own community building, management and dissemination tools, the core one being Innovation Place© www.innovationplace.eu. As Europe's largest independent public funding advisory, PNO supports over 2000 clients throughout Europe, annually developing over 120 European consortia funding proposals, and fostering their successful implementation in many technology domains through management, technology intelligence, exploitation and dissemination services. The company is also versed in the establishment and management of funding programmes.

www.ciaotech.com

EASN Technology Innovation Services BVBA



EASN TIS is a private company created by EASN, the European Aeronautics Science Network, in order to enable EASN and its network of 9000 European aeronautics researchers participate in research programmes.

EASN is very active in a wide range of air transport research and innovation projects, including: HERMES – Establishing a CompreHEnsive transport Research information Management and Exchange System; SARISTU – Smart Intelligent Aircraft Structures Collaborative Project: Level II; SUNJET – SUstainable Network for Japan-Europe aerospace research and Technology cooperation; COOPERATEUS – Conditions of success for R&T Open Options through a Platform of communications and for Expressing Recommendation Actions to Team-up Europe and U.S. ; ENCOMB – Extended Non-Destructive Testing for Composite Bonds; INMA – Innovative Manufacturing of Ti sheet complex components for cost-efficient and ecological production.

www.easn-tis.com

2. STAKEHOLDERS

CATER R&I Community – proposed affiliate partners



The **European Commission**, in particular the DG for Mobility and Transport and its platforms (i.e. DG MOVE, The Rail Strategy Platform, other research coordination groups, Work Programmes, ICT for TRANSPORT) shall be a critical part of the CATER R&I affiliate partner community.ec.europa.eu/transport/index_en.htm



The **EASN Association** is represented in the CATER project by **EASN-TIS**. The latter is exclusively authorized to act on behalf of the Association in the frame of research projects. The EASN Association has more than 130 registered active members including individuals, university labs, universities, and other organizations plus more than 10.000 direct or indirect contacts with researchers and scientists throughout Europe, active in aeronautics related research. www.easn.net



The Association of European Research Establishments in Aeronautics, **EREA**, is connected through its member ONERA, a CATER partner. erea.org



ACARE is linked via CATER partner SESM (Finmeccanica) which currently holds the chair of ACARE Italy. The chairman of ACARE Italy has given his availability for membership of the CATER Advisory Board as has **Dr. Volker Heil**, Member of ACARE General Assembly and Head of Research and Development at **DFS Deutsche Flugsicherung GmbH**. In particular, the ACARE WG1 and Monitoring Group shall be key figures within the CATER affiliate partner network. A strong activity will be accomplished to involve within the CATER Advisor Board a member of ACARE Monitoring Group in order to better drive and assess the CATER activities. In doing so, CATER members, enlisted in ACARE group, will politically support this step advertising the CA activities into ACARE Steering groups to attract them. www.acare4europe.com



The Aerospace and Defence Industries Association of Europe (**ASD**) is also connected by way of the close association of SESM (Finmeccanica) and ASD member **AIAD**, the Italian Companies for Aerospace, Defence and Security. www.asd-europe.org



SESAR is connected through CATER partner SESM which, as part of the SELEX Consortium is one of the SESAR members; SESM is actually active on more than 20 SESAR projects both operational and technical ones. www.sesarju.eu



Both SESAR and the **EUROCONTROL** Experimental Centre are linked to CATER through CATER partner ONERA which forms part of the SESAR-EUROCONTROL research network HALA!www.eurocontrol.int



The IATA is linked via CATER partners SESM and FIS which are both strategic IATA members (SESM as part of SELEX and FIS as part of ICTS).www.iata.org



SITA is closely linked to CATER partner SESM through their collaborative work on several SESAR projects including ATC Full Datalink .www.sita.aero



The International Civil Aviation Organisation is linked by participation of several CATER partners involvement, in particular SESM, in ICAO work groups.www.icao.int



EUROCAE, the European Organisation for Civil Aviation Equipment, is linked to CATER by way of its members SESM (as part of SELEX) and ALTRAN and their participation in EUROCAE working groups.www.eurocae.net



ACI, the Airports Council International, shall be involved by way if CATER partner TGM which is an ACI member, and involved into ACI Facilitation and Customer Services Committee and also in ACI Regional Airport. In the ACI community, TGM will spend most of its effort in catching their interest on CATER initiatives trying to involve some airlines and handlers as CATER affiliate members enlarging the R&I Community.www.aci.aero